ZABRODIN, P.I.; PRUSLIN, Ya.A.; VAKULIN, A.N.

Laboratory investigations of the flooding of unrecovered oil from a flooded reservoir with solvents. Trudy VNII no.42:143-152 '65. (MIRA 18:5)

ZABRODIN, P.I.

Experimental study of the process of miscible drive from a flooded layer. Trudy VNII no.40:78-87 '63 (MIRA 17:7)

ZABRODIN, P.I.; RAKOVSKIY, N.L.; ROZENBERG, M.D.

Investigation of petroleum displacement by solvents in a model of great length. Nauch.-tekh. sbor. po dob. nefti no.17:16-22 '62. (MIRA 17:8)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

VAKULIN, A.N.; ZABRODIN, P.I.

Study of the solvent flooding process. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no.2:104-111 '65. (MIRA 18:8)

CHERNYSHEV, G.I.; ZABRODIN, P.I.; PRUSLIN, Ya.A.; PAVLOV, V.N.

Two-channel scintillation gamma-ray spectrometer for study in boreholes. Trudy VNII no.35:30-39 '61. (MIRA 15:2)
(Oil well logging, Radiation)

GOLOSOV, I.M., prof.; KLIMONTOV, M.I.; ZABRODIN, V.A.

Results of testing brucellosis vaccine from strain No.19 on reindeer. Veterinariia 41 no.12:29-31 D '64. (MIRA 18:9)

1. Leningradskiy veterinarnyy institut (for Golosov, Klimontov).
2. Institut sel'skogo khozyaystva Kraynego Severa (for Zabrodin).

ZABRODIN, V. A.

USSR (600)

Electric Railroads - Cars

Starting diagrams of railroad motocars serie Sd and the conditions determining their application. Trudy TSNII MPS, No. 7, 1947.

9. Monthly List of Russian Accessions, Library of Congress, October 1958, Uncl.

ZABRODIN, V. A., Cand Vet Sci -- (diss) "Clinico-Epizootological Characteristics and Etiology of Bursitis in Reindeer." Len, 1957. 17 pp (Min of Agriculture USSR, Len Veterinary Acad), 100 copies (KL, 48-57, 108)

GOLOSOV, I.M., doktor vet nauk; ZABRODIN, V.A., kand. vet nauk

Brucellosis in reindeer. Veterinariia 36 no.11:23-25 N '59
(MIRA 13:3)
1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva Kraynego Severa (for Zabrodin).
(Brucellosis) (Reindeer--Diseases and pests)

ZABRODIN, V.A.

Belgian electric rolling stock. Elek. i tepl. tiaga 7 no.6: 47-48 Je '63. (MIRA 16:9)
(Belgium--Electric railroads)

ZABRODIN, V.A.

Memorable date. Elek.i tepl.tiaga 3 no.10:22 O '59.
(MIRA 13:2)

(Moscow Province--Electric railroads)

ACC NR: AP6034227 (N) SOURCE CODE: UR/0120/66/000/005/0110/0114

AUTHOR: Nazarov, V. B.; Zabrodin, V. A.; Kirillov, P. K.; Gal'perin, L. N.

ORG: Affiliate of the Institute of Chemical Physics, AN SSSR, Chernogolovka (Filial Instituta khimicheskoy fiziki AN SSSR)

TITLE: Reversible digital to analog converter counter based on decatrons

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1966, 110-114

TOPIC TAGS: pulse counter, digital analog converter

ABSTRACT: Figure 1 shows a simplified diagram of the digital to analog converter, associated with an up-down counter utilizing decatrons as counting elements. Such a counter is frequently needed in automatic control applications, where it is necessary to obtain a voltage proportional to the accumulated number of pulses. While the actual counter circuitry is conventional for use with decade counting and glow transfer tubes, the method of digital to analog conversion is quite unusual. As shown in figure 1, each decade is equipped with a bank of resistors. One resistor is associated with each cathode (except "0") in each of the three decatrons. The resistor values are weighted to generate output voltage exactly proportional to the instantaneous accumulated pulse count stored in the decatrons. Constant current sources are used to supply each of the tubes. The design of the current sources is conventional, utilizing a series triode in

Card 1/2 UDC: 621.374.324

ACC NR: AP6034227

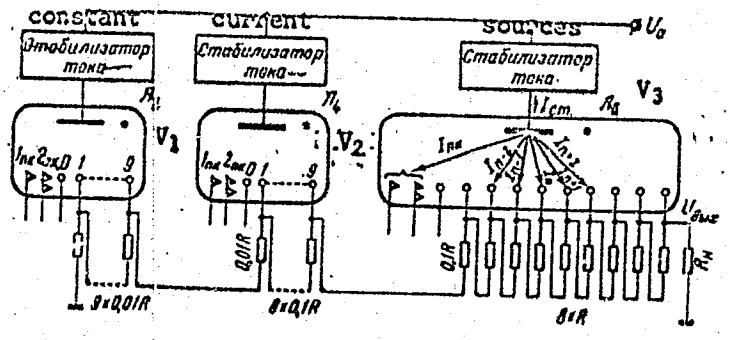


Fig. 1.

which the grid bias is maintained constant by a transistor network with a voltage reference in the form of a glow tube. The expressions for the output voltage and the predictable errors are given as functions of the pulse count and the circuit parameters. The total conversion error does not exceed 0.1% for temperature fluctuation of ±5°C and line voltage changes of ±10%. Transistor logic is utilized in the input signal and the steering control. The instrument can be used for generation of extremely long ramp voltages. In this case the input pulses are generated by a crystal controlled oscillator. Orig. art. has: 4 figures, 5 formulas.

SUB CODE: 09/ SUBM DATE: 27Aug65/ ORIG REF: 003/ OTH REF: 001

Card 2/2

SEMENOV, S.S.; ZABRODIN, V.I.

System for the condensation and cooling of the vapor products obtained in the semicoking of oil shales. Trudy VNIIT no.8: 75-81 '59. (MIRA 13:4)
(Oil shales)

ZABRODIN, V.I.

PHASE I BOOK EXPLOITATION SOV/3335

[illegible]

Vsesoyuznyy nauchno-issledovatel'skiy institut pererabotki i ispol'zovaniya topliva

Khimiya i tekhnologiya topliva i produktov yego pererabotki, vyp. 8 (Chemistry and Technology of Fuel and Products of Refining, Nr 8) Leningrad, Gostoptekhizdat Otd, 1959. 247 p. (Series: Its: Trudy) Errata slip inserted. 2,500 copies printed.

Sponsoring Agency: R.S.F.S.R. Leningradskiy ekonomicheskiy administrativnyy rayon. Sovet narodnogo khozyaystva.

Ed.: V.N. Erikh; Exec. Ed.: A.A. [illegible]; Tech. Ed.: A.B. Yashchurzhinskaya; Editorial Board of series: E.S. Bezmozgin, A.Ye. Drabkin, D.K. Kollerov, S.S. Semenov, A.S. Sinel'nikov, and A.S. Poteyev.

PURPOSE: This collection of articles is intended for scientific, engineering and technical personnel in plants of the fuel and gas industry.

COVERAGE: The results of research and experimental work carried out in 1957 and 1958 by the All-Union Scientific Research Institute for Shale Processing are summarized in this collection. Organic components of oil shale from various regions, their chemical composition, and physical and chemical properties are reviewed, along with the production of gas from oil shale. Also discussed are: semicooking of oil shale, analysis of oil shale and shungite, fractionation of tar obtained in oil shale semicooking, conversion of fan and the equipment used, hydrogenation of diesel fuel produced from oil shale, extraction of phenol, and purification of tarry waters by anionite and formaldehyde. Most articles are accompanied by references. In addition, the book contains an annotated bibliography of 126 Soviet and non-Soviet works on the processing of oil shales.

Kollerov, D.K. Thermophysical and Physicochemical Properties of Oil Shale From the Baltic Region. (Article 2) Heat Capacity of Oil Shale and Temperature of Oil Shale Semicooking 35

Vaynshteyn, Ya.I. Testing of Gas Generating Stations of the Oil Shale Gas Works in the Town of Slantsy 52

[illegible], N.S., M.M. Barshchevskiy, and M.M. Vasil'yeva. Prospects of Using Oxygen at Plants Producing Gas From Oil Shale 66

Semenov, S.S., and V.I. Zabrodin. Condensation and Cooling System for the Vapor and Gas Mixture Produced in the Semicooking of Oil Shale 75

[illegible], A.Z. Method o. Radiant Heat Transfer in [illegible] Flows 82

Grigor'yev, [illegible], L.M. Babin, and A.Ye. Drabkin. Study of Toxicity of [illegible] Fractions of Gasoline Produced From Lignite for the Purpose of Odorizing Fuel Gases 97

Ivanov, B.I., N.I. Zelenin, N.P. Sharonova, and Yu.A. Kozak. Formation of Polymers and Corrosion of the Kokhtla-Yarve-Leningrad Gas Pipeline 106

[illegible], V.I., and V.L. Klimenko. New Pipe Stills for Conversion of Hydrocarbon Gas 113

[illegible], Ye.V., and M.O. [illegible]. Hydrogenation of Diesel Fuel Produced From Oil Shale 133

[illegible], L.I., and S.S. Nazarova. Composition of Chemical Groups and Floating Properties of Neutral Oxygen Compounds Contained in Shale Tar Produced by Semicooking 142

Kobyl'skaya, M.V. Pyrolysis of the Fraction Contained in Shale Tar From the [illegible] Chamber With a Eutectic Point up to 200°C 15[illegible]

Lapin, V.N., and S.S. Nazarova. Ways of [illegible] Production of Surface-Active Components of Oil Shale Tar 170

Kobyl'skaya, M.V. Composition of Pyridine Bases of Oil Shale Tar From the Furnace Chamber 198

Ivanov, B.I., and Yu.A. Kozak. Countercurrent Extraction of Phenol From Tarry Waters [illegible] With Butylacetate and the Problem of Mass Transfer 20[illegible]

Ivanov, B.I., N.P. Sharonova, and Z.V. Shul'man. Purification With Anionite of Oil Shale Tarry Waters 213

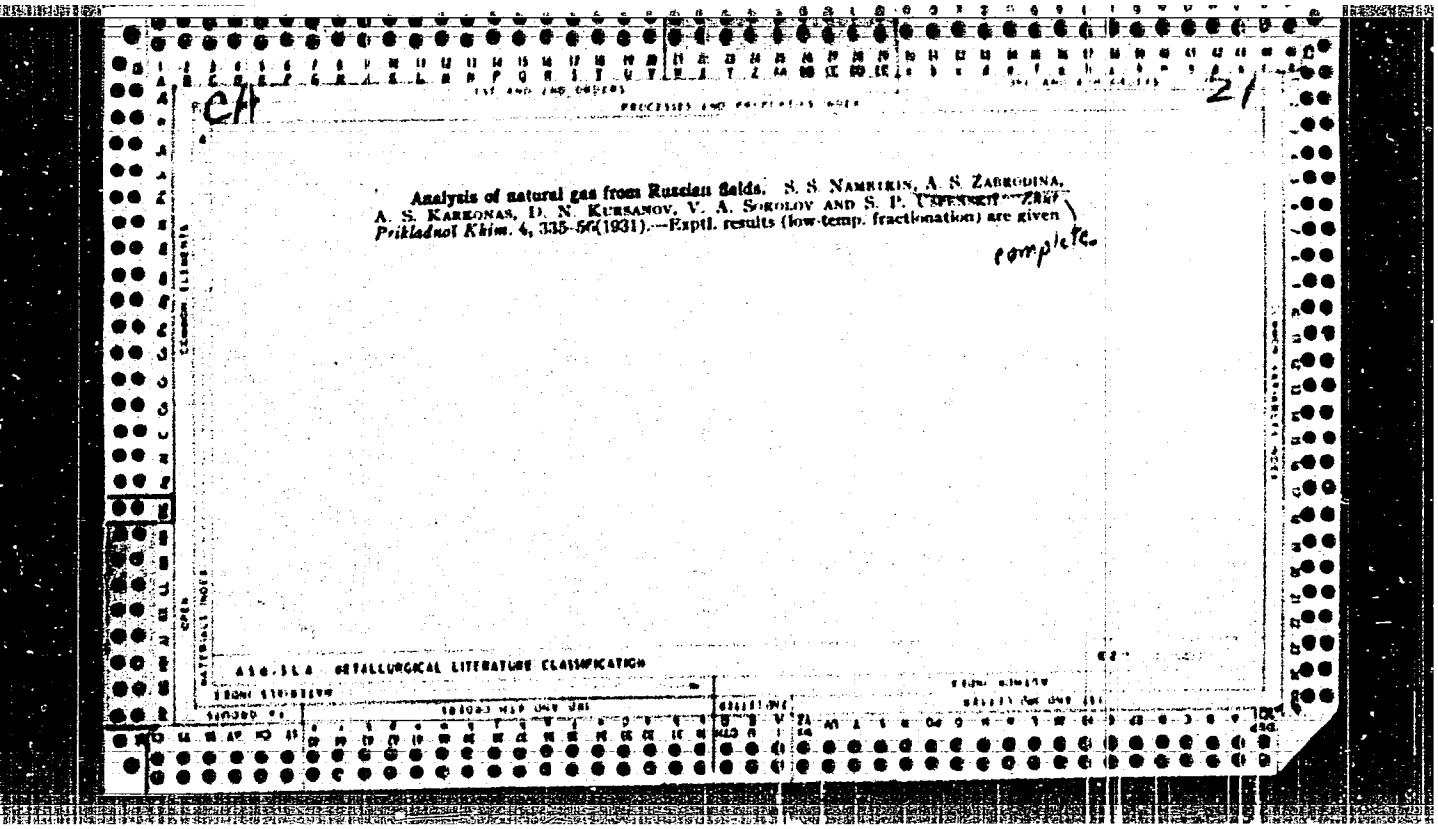
Ivanov, B.I., and K.A. Galutkina. Purification of Phenol Waters Produced During the Thermal Conversion of Oil Shale by Means of Condensation With Formaldehyde 220

[illegible], Ye.A. Bibliography With [illegible] Problems

GAMILEYA, Yu.N.; ZABRODIN, V.Ye.; KOGEN, V.S.

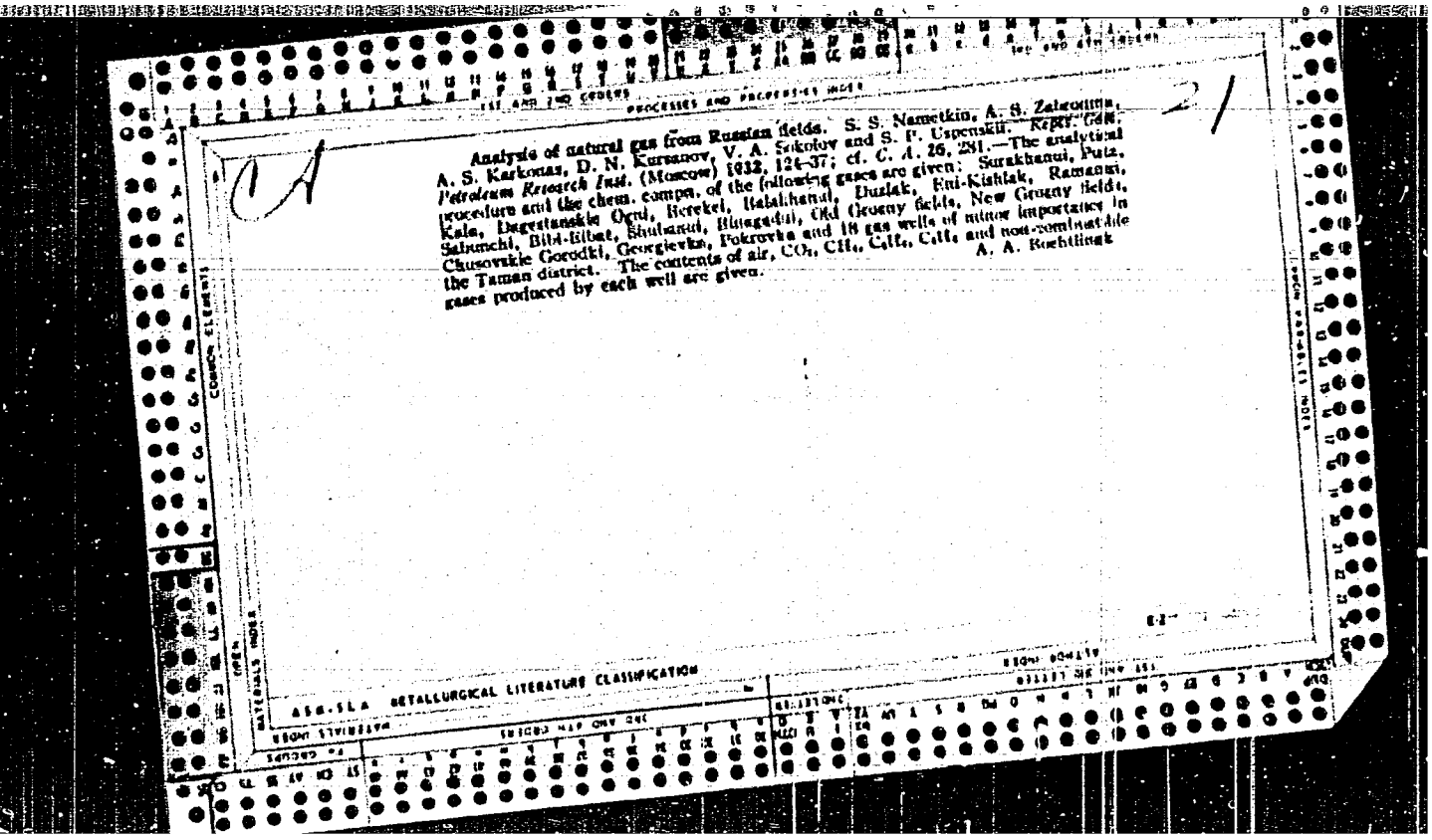
Early Sinian volcanic sedimentary deposits of the southeastern Aldan Shield (Uchur River basin). Dokl. AN SSSR 152 no.3: 690-692 S '63. (MIRA 16:12)

1. Aerologicheskaya ekspeditsiya No.2 Vsesoyuznogo aerologicheskogo tresta. Predstavleno akademikom A.L.Yanshinym.



Analysis of natural gas from Russian fields. S. S. NAMIKIN, A. S. ZABRODINA, A. S. KARKONAS, D. N. KURSANOV, V. A. SOKOLOV AND S. P. UPENSKII. *Prikladnoi Khim.* 4, 335-56(1931).—Expt. results (low-temp. fractionation) are given

complete



Analysis of natural gas from Russian fields. S. S. Nametkin, A. S. Zaleomina, A. S. Karkonas, D. N. Kurnasov, V. A. Sokolov and S. P. Uspenskii. *Repts. Gen. Petroleum Research Inst.* (Moscow) 1932, 124–37; cf. C. A. 26, 291.—The analytical procedure and the chem. compn. of the following gases are given: Surakhani, Putz, Kala, Dagestanskie Ogni, Berekei, Ilalakhani, Duzlak, Eni-Kishlak, Ramani, Sabunchi, Bibi-Eibat, Shubani, Binagadi, Old Grozny fields, New Grozny fields, Chusovskie Gorodki, Georgievka, Pokrovka and 18 gas wells of minor importance in the Taman district. The contents of air, CO_2, CH_4, C_2H_6, C_3H_8 and non-combustible gases produced by each well are given.

A. A. Boehtlingk

ZABRODINA, A.S.; LEVINA, S.Ya.

Use of copper for the absorption of halogens in the microdetermination of carbon and hydrogen. Zhur.anal.khim. 17 no.5:644-646 Ag '62. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Carbon--Analysis) (Hydrogen--Analysis) (Halogen compounds)

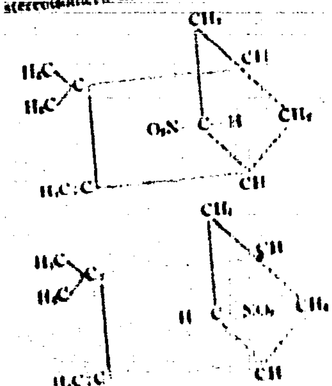
ZABRODINA, A. S.

"Recherches dans le domaine des homologues du groupe de camphre. Communication XII". Namejetkine, S. S. et Zabrodina, A. S. (p. 1666)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1936, Vol. 6, No. 11

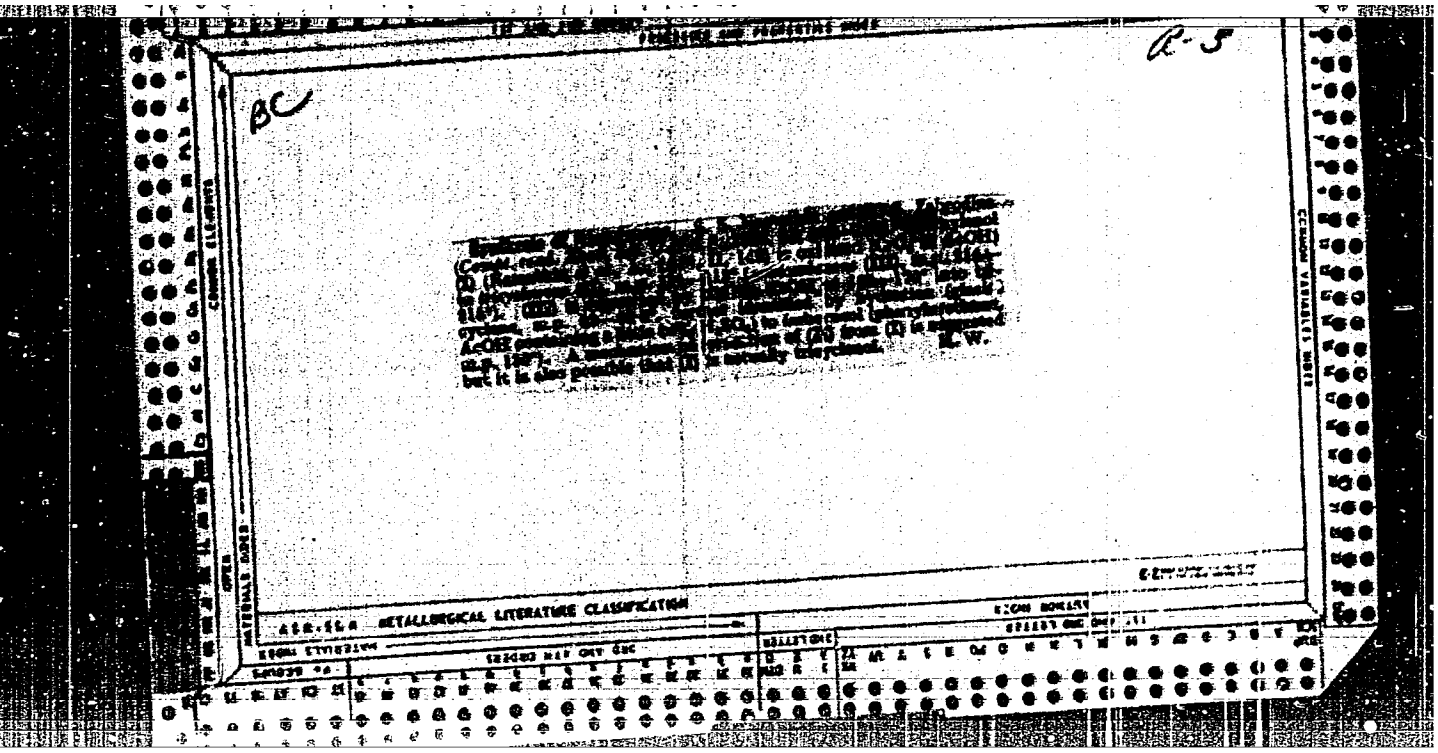
10

New series of camphene derivatives. S. S. Nametkin and A. S. Zabrodina. *Bull. acad. sci. U. R. S. S., Classe sci. math., Sér. chim.* **1937**, 1015-33 (in German 1033); cf. *C. A.* **31**, 2200[8]. ω-*Nitrocamphene* (I), previously obtained as the sole neutral product of the reaction of dil. HNO_3 on tricyclene (*C. A.* **30**, 6356[6]), exists in 2 modifications: liquid, b_{15} 119-19.5°, d_4^{20} 1.0931, n_D 1.4942, M. R. 49.35 (calcd. for $C_{10}H_{15}NO_2$ with a correction for the CH_2 double bond, 49.65), and cryst., m. 114-15°, sepd. from I in NaOH with 10% H_2SO_4 at 0°. Contrary to Asahina and Tukamoto (*C. A.* **31**, 3889[6]), the cryst. modification is not the aci-form of I, because it is a stable compd., is sol. only in concd. NaOH on heating and does not give the red reaction of iso-NO_2 compds. with $FeCl_3$. Equally erroneous is their assumption that the liquid I, cryst. form on melting is converted into the liquid I, because on cooling (preferably with stirring) it solidifies to a product, m. again 114°. The 2 forms give an identical pseudonitrole, m. 108°. It is postulated that the cryst. form is a stereoisomeric modification of the liquid I.



ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Which of these configurations corresponds to the liquid and cryst. I has not yet been detd. *ω-Isonitrocamphene*, $C_{10}H_{15}NOOH$ (the aci form), m. 60-2°, was obtained when the liquid I was heated with a little 30% NaOH, then dild. with H_2O, the turbid mixt. washed with petr. ether and neutralized exactly with 20% H_2SO_4 at -4°. The ppt. was then filtered off, washed with iced water, dried for 1 hr. in a vacuum desiccator cooled with ice, then dissolved in dry Et_2O and crystd. over H_2SO_4 in vacuo. The compd. gives all the reactions of an iso-NO_2 compd. and is converted into the cryst. I by treatment with MeOH and H_2O. *ω-Aminocamphene*, b_{755} 197.8°, d_4^{20} 0.9320, n_D 1.4938, M. R. 46.95 (calcd. 46.80), resulted in 3.5 g. yield from 6 g. I (liquid) by reduction with Zn dust in AcOH. This was converted into the $C_{10}H_{15}NMe_3OH$ by treating it with MeI in MeOH with 2 alternate addns. of KOH in 20% alc. and MeI and refluxing at 45-50° for 24 hrs. The distn. residue, after drying over H_2SO_4 in vacuo and extg. with abs. alc., was decompd. with AgOH and filtered. The soln. was concd. and then distd., giving, after steam redistn., 4 g. of a compd. $C_{10}H_{14}$, b_{755} 149-50°, m. 41.5-2°, identified as *tricamphadiene* (or *camphenene*) (CH_2:C.CMe_2.CH.CH_2.CH.CH:C-H) (II). It reacts similarly to camphene with Br_2 in $CHCl_3$, $KMnO_4$ and HNO_3, and similarly to cyclohexadiene with alc. H_2SO_4 (1:1), forming successively a yellow, light and dark red soln. Bornylene and camphene do not give these color reactions. Titration of II with BzO_2H gave 100.2% for the compd. $C_{10}H_{14}$ with 2 double bonds. II (2.35 g.) in 6 g. of 100% AcOH with 0.2 g. of 50% H_2SO_4, refluxed at 55° for 6 hrs. gave 2.2 g. of *bornylenyl acetate*, b_{10} 100.7°, d_4^{20} 1.0110, n_D 1.4662, M. R. 51.68 (calcd. for $C_{10}H_{15}OAc$, 54.4). The ester sapond. with alc. KOH, then extd. with Et_2O and the evapd. residue recrystd. from C_6H_{14} at 0° gave 2 g. *bornylenol*, b_{10} 103-4°, m. 60-1°. The alc. (an unsatd. analog of isoborneol) and its ester are the only known true derivs. of bornylene. *ω-Camphenone*, m. 77-8°, was obtained in 90% yield by oxidation of I with 1.5% $KMnO_4$ at 0° (cf. *loc. cit.*). At temps. above 20° the white crystals change to a yellow liquid, which at lower temps. (winter) is changed again to its former cryst. state. *Semicarbazone*, m. 205° (decompn.); *oxime*, m. 117-18°. Approx. 50 references. Chas. Blanc



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ZABRODINA, A. S.

PA 55/49T13

USSR/Chemistry - Camphenone Nov 48
Chemistry - Hydrocamphenone

"Alpha-Dihydrocamphenone and Several Transformations of It," A. S. Zabrodina, Moscow State U imeni M. V. Lomonosov, 3 1/3 pp

"Dok Ak Nauk SSSR" Vol LXIII, No 3

Comparative melting points are given for following substance obtained by Lipp and the author: alpha-dihydrocamphenone, semicarbazide alpha-dihydro[illegible]camphenone, cisisocamphocamphoric acid and transisocamphocamphoric acid. Submitted by Acad S. S. Nametkin 17 Sep 48.

55/49T13

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ZAGRODINA, A.S.

J

The creative path of Sergei Semenovich Kamenetskii. A. S. Zabrodina, D. N. Kurnakov, N. N. Mel'nikov, and A. K. Ruzhentsova. *Uspekhi Khim.* 19, 657-72(1950).—Obituary, with portrait. N. T.

1951

CA

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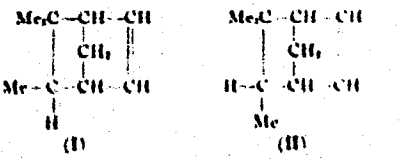
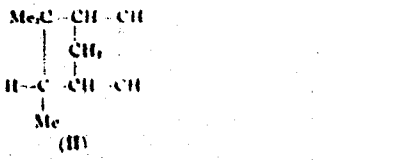
Isocamphene, a new terpene of $C_{10}H_{16}$ composition. A. S. Zaharulina (M.V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 70, 429-31(1950). Reduction of 12 g. *α-dihydrocamphenone*, m. 108-9°, with 10 g. Na in aq. EtOH-Et_2O and steam distn. gave 5% *corresponding pinacol*, m. 141.5-3.5°, and steam-volatile *α-isocamphanol*, m. 105.6° (from petr. ether), apparently a stereoisomer mixt. The Chugaev method (*C.A.* 7, 3120) applied to this alc. gave a rel oily *methyl xanthate*, which on thermal decompn. at 160-200° gave *isocamphene*, m. 68.9°, bp. 154-5°, contg. some 5% tricyclene on the basis of treatment with H_2O_2; oxidation with KMnO, in CH_3 at 50-60° gave *cis-isocamphoric acid*, m. 224°. The structure of isocamphene is I or II:



(I)



(II)

G. M. Kosolapoff

1957

ZABRODINA, A. S.,

ZABRODINA, A.S.; MIROSHINA, V.P.

Simultaneous microdetermination of carbon, hydrogen, and alkali metal lithium, sodium, potassium). Vest.Mosk.un.Ser.mat., mekh., astron., fiz.,khim. 12 no.2:195-198 '57. (MIRA 10:12)

1.Kafedra organicheskoy khimii Moskovskogo universiteta.
(Chemistry, Analytical--Quantitative)
(Microchemistry)

ZABRODINA, A.S.; SEVINA, S.Ya.

Microdetermination of carbon and hydrogen in silane organic compounds. Vest. Mosk. un. Ser. mat., mekh., astron., fiz. khim., 12 no.5:183-186 '57. (MIRA 11:9)

1.Kafedra organicheskoy khimii Moskovskogo gosudarstvennogo universiteta.
(Carbon) (Hydrogen) (Silane)

AUTHORS: Zabrodina, A. S.; Suvorova, K. M.; and Sheynina, S. Z.

TITLE: 2-Propylcamphane and its Derivatives (2-Propilkamfan i yego proizvodnyye)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, No. 1, pp. 138-141 (U.S.S.R.)

ABSTRACT: Studying the chemical conversions of 2-allylcamphane, it was discovered that it easily attracts hydrogen forming 2-propylcamphane as well as bromine thus giving 2-(beta-gamma-dibromopropyl)-camphane. The hydrogen bromide dissolved in ice-cold acetic acid attracts 2-allylcamphane in contrast to the Markovnikov law offering good yields of 2-(gamma-bromopropyl)-camphane. The addition of hydrogen bromide to 2-allylcamphane in an aqueous medium takes place also in contrast to the Markovnikov law even though the yield is much lower. The structure of 2-(gamma-bromopropyl)-camphane was proven by the fact that during its heating with sodium acetate in ice-cold acetic acid, good yields of 2-(gamma-acetoxypropyl)-camphane were obtained. Saponification of the latter yielded 2-(gamma-oxypropyl) camphane. The determination of the primary alcohol content by the Radcliffe-Chadderton method (4) showed that it really is primary alcohol. The oxidation of 2-(gamma-oxypropyl)-camphane with either

Card 1/2

C

ZABRODINA, A.S.; ZABRODINA, K.S.

Nitration of paraffins, cycloparaffins and paraffin chain of aromatic compounds; the M.I.Konovalov reaction. Reakts.org. soed. 7:133-222 '58. (MIRA 12:5)
(Paraffins) (Nitration)

5(2),5(3)

AUTHORS: Zabrodina,A.S., and Bagrayeva,M.R. SOV/55-58-4-23/31

TITLE: A Micro Process for the Determination of Selenium in Organic Combinations of C,H,O,N,Se (Mikrometod opredeleniya selena v organicheskikh soyedineniyakh sostava C,H,O,N,Se)

PERIODICAL: Vestnik Moskovskogo universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 4, pp 187-192 (USSR)

ABSTRACT: It is stated that during the combustion of selenium-organic combinations in an oxygen flow the selenium can be changed into selenoxide also without platinum contacts (compare Umezawa [Ref4]). For a not too quick combustion, this fact can be used for a simplified proof of selenium, where the content of selenium dioxide is determined with the aid of iodine. The error is ± 0.3 %. The selenium-organic combinations investigated by the authors were derived from the laboratory for the chemistry of heterocyclic combinations (leader: Professor Yu.K.Yur'yev). There are 5 references, 4 of which are German, and 1 Japanese.

ASSOCIATION: Kafedra organicheskoy khimii (Chair of Organic Chemistry)

SUBMITTED: July 1, 1957

Card 1/1

5(2),5(3) SOV/55-58-4-31/31

AUTHORS: Yegorova, N.P., and Zabrodina, A.S.

TITLE: Microproof of Carbon and Hydrogen (Mikrodokazatel'stva ugleroda i vodoroda)

PERIODICAL: Vestnik Moskovskogo universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1959, Nr 4, pp 235-238 (USSR)

ABSTRACT: Using the results of M.O.Korshun and V.A.Klimova the author developed a method for the microproof of carbon and hydrogen in organic combinations. The combination to be analyzed is burned with a great velocity (3-4 minutes) in a broad empty tube under a great surplus of oxygen. An error by incomplete burning is not possible. The exactness of the method is ca. ± 0.2%.
There are 5 references, 1 of which is Soviet, 2 English, and 2 American.

ASSOCIATION: Kafedra organicheskoy khimii (Chair of Organic Chemistry)

SUBMITTED: April 2, 1959

Card 1/1

USCOMM DC 60.538

ZAHRODINA, A.S.; YEMOROVA, N.F.

Simultaneous microdetermination of carbon, hydrogen, and a halogen. Vest. Mosk un. Ser. 2: Khim. 15 no.4:66-70 Jl-Ag '60. (MIRA 13:9)

1. Laboratoriya mikroanaliza Moskovskogo universiteta.
(Carbon--Analysis) (Hydrogen--Analysis)
(Halogens--Analysis)

ZAKRODINA, A.S.; KHLYSTOVA, A.P.

Microde ermination of selenium in organic compounds containing chlorine, bromine, and sulfur. Vest.Mosk.un.Ser. 2: Khim. 15 no.1:69-72 '60. (MIRA 13:7)

1. Kafedra organicheskoy khimii Moskovskogo universiteta.
(Selenium--Analysis)

ZABRODINA, A.S.; LEVINA, A.Ya.

Microdetermination of carbon and hydrogen in double salts of aryl diazonium chloride and metal chlorides. Vest.Mosk.un.Ser. 2: Khim. 15 no.1:55-56 '60. (MIRA 13:7)

1. Kafedra organicheskoy khimii Moskovskogo universitota.
(Carbon--Analysis) (Hydrogen--Analysis) (Diazonium Compounds)

CHARUKHINA, Z.N., kand.tekhn.nauk; ZABRODINA, I.P., inzh.

Determining the concentration of chromium salts by the density of the solutions. Nauch.issl.trudy NIIMP no.11:37-40 '62. (MIRA 16:5)
(Tanning)

CHAHUKHINA, Z.N., kand.tekhn.nauk; KIVSHITS, Ye.A., mladshiy nauchnyy sotrudnik; GRIGOR'YEVA, N.V., starshiy nauchnyy sotrudnik; ZABRODINA, I.P., laborant

Determining the concentration of solutions used in fur manufacture by their electric conductivity. Nauch.-issl.trudy NIIMP no.9:56-70 '59. (MIRA 14:5)

(Fur--Dressing and dyeing)
(Solution(Chemistry)--Electric properties)

CHARUKHINA, Z.N., kand. tekhn. nauk; ZABRODINA, I.P., mladshiy nauchnyy sotrudnik

Possibility of the application of the chromatographic analysis for determining the changes occurring in the amino acid composition of the fur hair during dressing. Nauch. issl. trudy NIIKF no.12:56-62 '63. (MIRA 17:11)

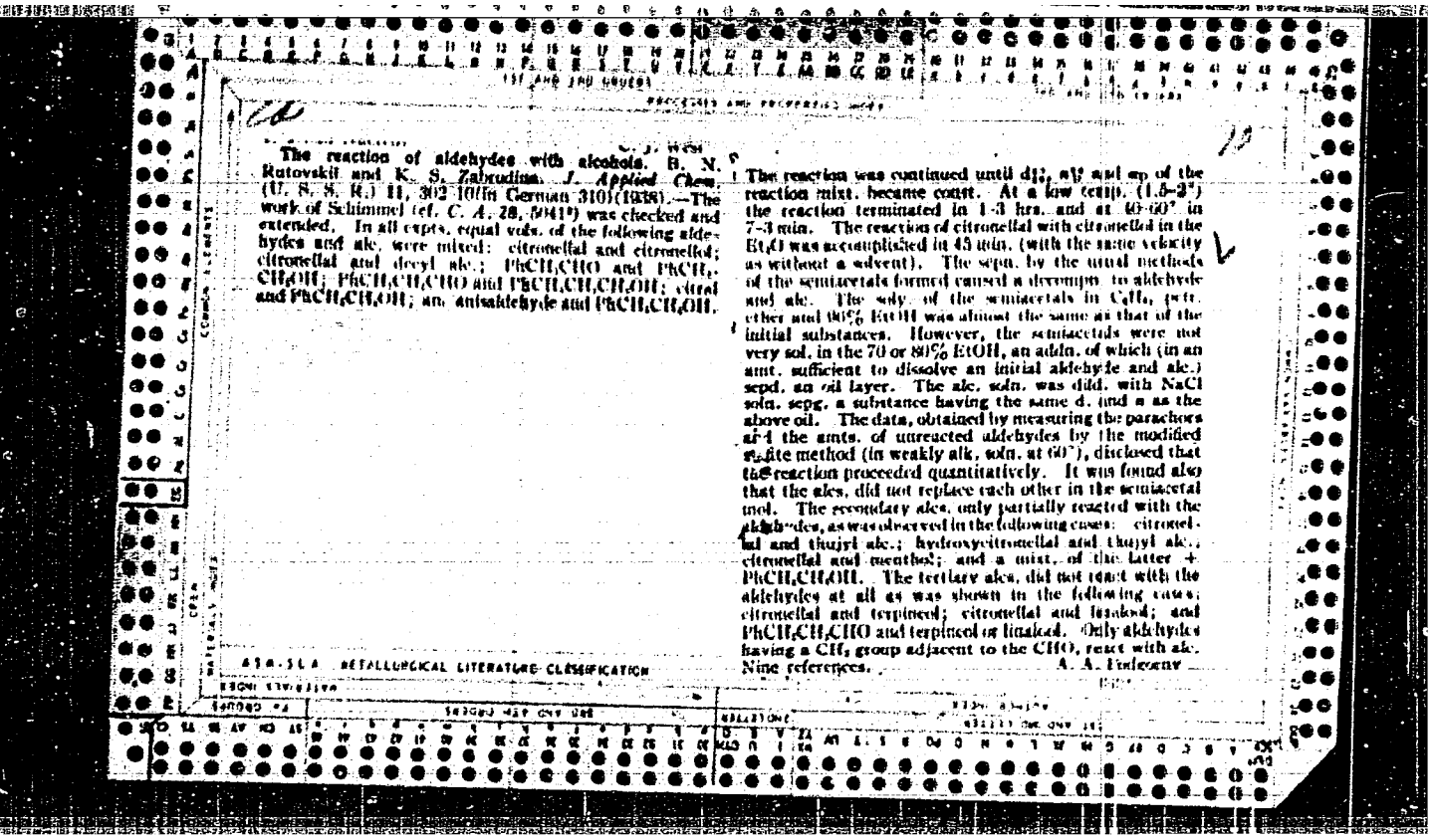
ZADRODINA, K. A.

Technic of taking electrocardiograms. Med. sestra, Moskva no.7:27-28 July 1951. (CLML 20:11)

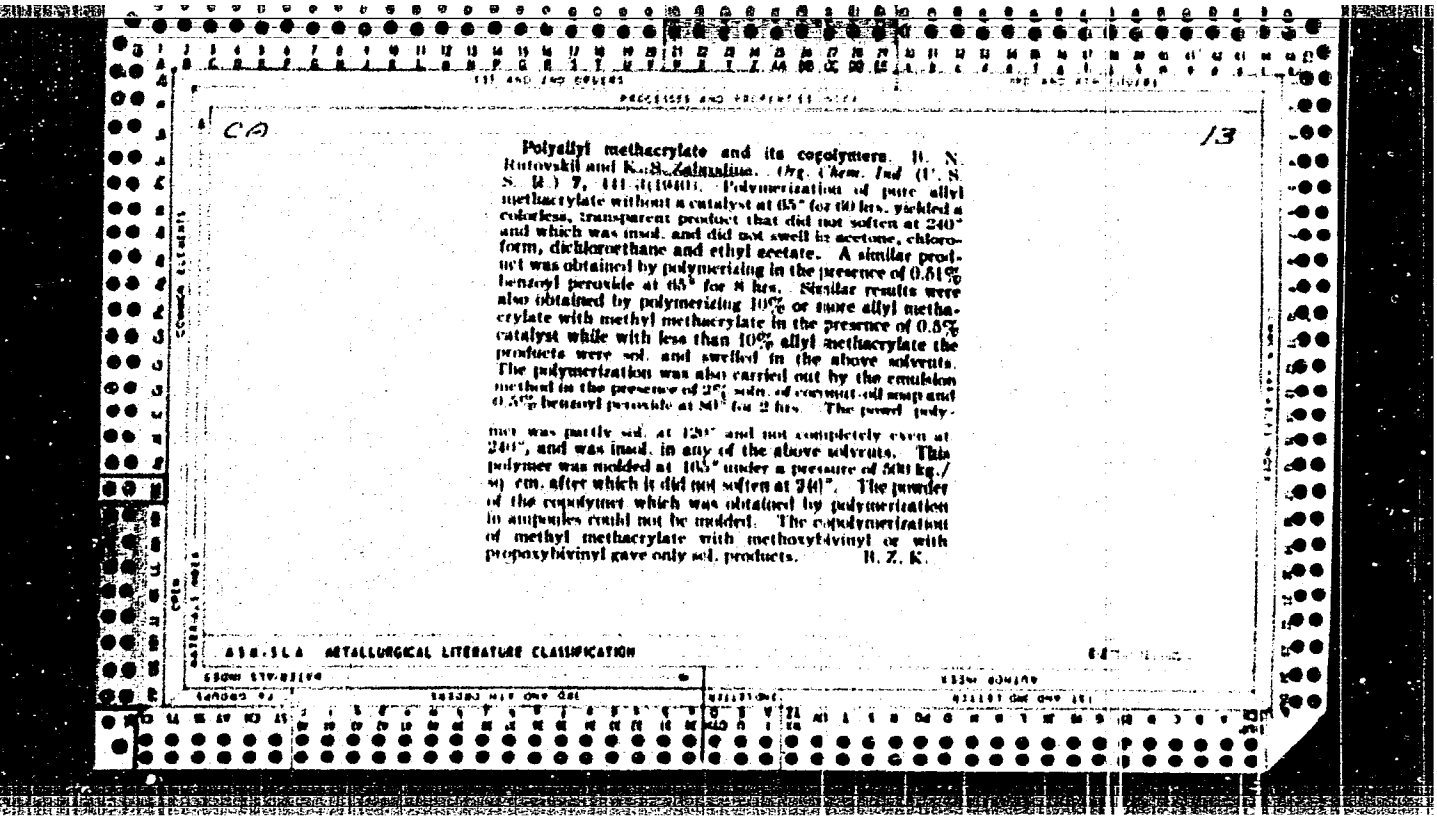
ZABRODINA, K.S.

Bromometric microdetermination of organic sulfides. Izv.AN SSSR Otd.khim.nauk no.5:941-943 My '63. (MIRA 16:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Sulfides) (Bromometry)



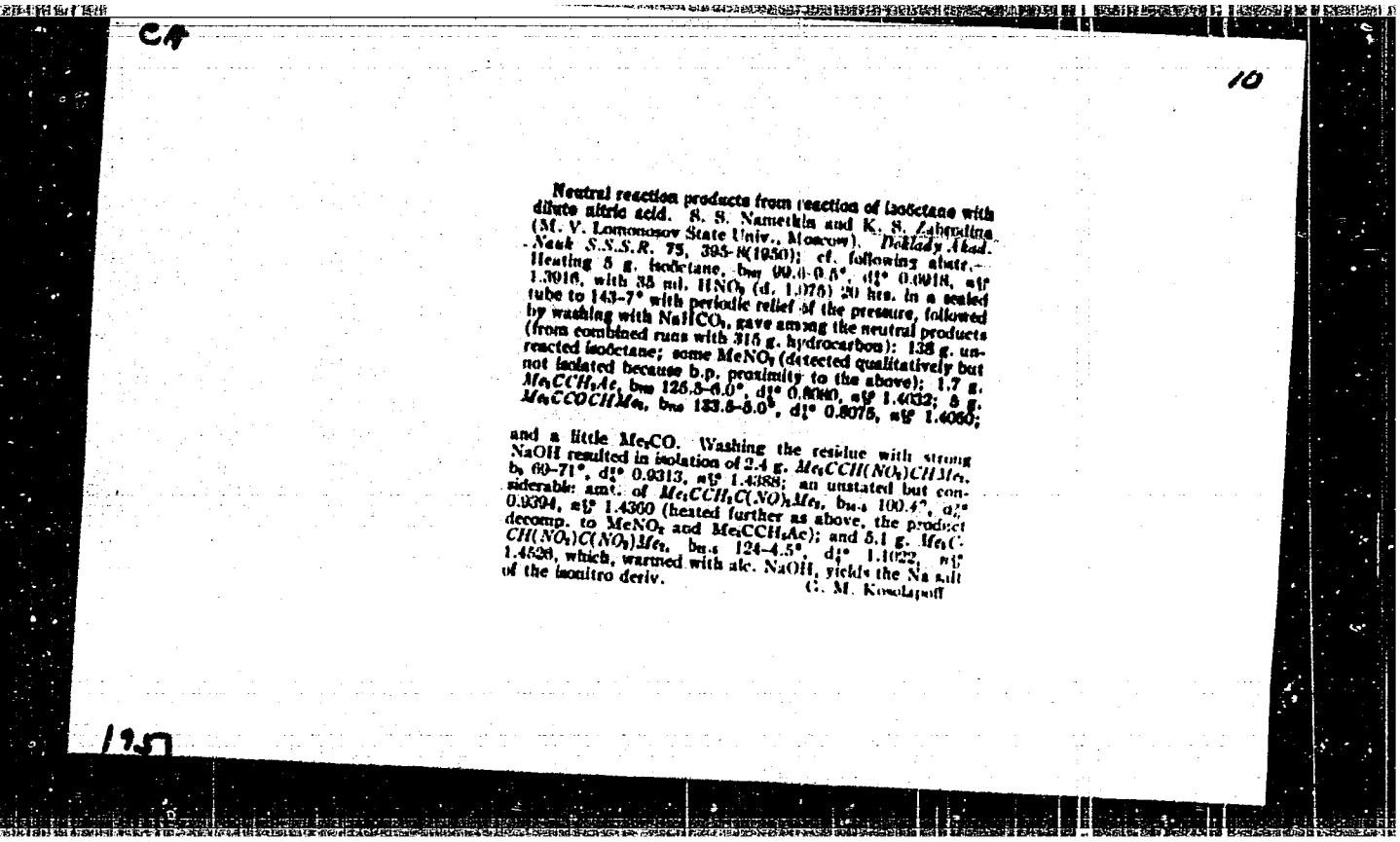
The reaction of aldehydes with alcohols. B. N. Ratovskii and K. S. Zabrodina. *J. Applied Chem. (U. S. S. R.)* 11, 302-10(in German 310)(1938).—The work of Schimmel (*cf. C. A.* 28, 5941[9]) was checked and extended. In all expts. equal vols. of the following aldehydes and alc. were mixed: citronellal and citronellol; citronellal and decyl alc.; $PhCH_2CHO$ and $PhCH_2CH_2OH$; $PhCH_2CH_2CHO$ and $PhCH_2CH_2CH_2OH$; citral and $PhCH_2CH_2OH$; an. anisaldehyde and $PhCH_2CH_2OH$. The reaction was continued until dil., ale. and aq. soln of the reaction mixt. became const. At a low temp. (1.5–2°) the reaction terminated in 1–3 hrs. and at 40–60° in 7–3 min. The reaction of citronellal with citronellol in the Et_2O was accomplished in 45 min. (with the same velocity as without a solvent). The separation by the usual methods of the semiacetals formed caused a decompn. to aldehyde and alc. The solv. of the semiacetals in CaH_2, petr. ether and 80% EtOH was almost the same as that of the initial substances. However, the semiacetals were not very sol. in the 70 or 80% EtOH, an addn. of which (in an amt. sufficient to dissolve an initial aldehyde and alc.) sepd. an oil layer. The alc. soln. was dild. with NaCl soln. sepg. a substance having the same d. and n as the above oil. The data, obtained by measuring the paraffinic acid the amts. of unreacted aldehydes by the modified sulfite method (in weakly alk. soln. at 60°), disclosed that the reaction proceeded quantitatively. It was found also that the alcs. did not replace each other in the semiacetal mol. The secondary alcs. only partially reacted with the aldehydes, as was observed in the following cases: citronellal and thujyl alc.; hydroxycitronellal and thujyl alc., citronellal and menthol; and a mixt. of the latter + $PhCH_2CH_2OH$. The tertiary alcs. did not react with the aldehydes at all as was shown in the following cases: citronellal and terpineol; citronellal and linalool; and $PhCH_2CH_2CHO$ and terpineol or linalool. Only aldehydes having a CH_2 group adjacent to the CHO, react with alc. Nine references. A. A. Unfeasny



CA 13

Polyallyl methacrylate and its copolymers. B. N. Rutovskii and K. S. Zainullina. *Org. Chem. Ind* (U. S. S. R.) 7, 441-3(1940). Polymerization of pure allyl methacrylate without a catalyst at 65° for 60 hrs. yielded a colorless, transparent product that did not soften at 240° and which was insol. and did not swell in acetone, chloroform, dichloroethane and ethyl acetate. A similar product was obtained by polymerizing in the presence of 0.5% benzoyl peroxide at 65° for 8 hrs. Similar results were also obtained by polymerizing 10% or more allyl methacrylate with methyl methacrylate in the presence of 0.5% catalyst while with less than 10% allyl methacrylate the products were sol. and swelled in the above solvents. The polymerization was also carried out by the emulsion method in the presence of 2% soap, of coconut-oil soap and 0.5% benzoyl peroxide at 80° for 2 hrs. The pearl polymer was partly sol. at 120° and not completely even at 240°, and was insol. in any of the above solvents. This polymer was molded at 165° under a pressure of 500 kg./sq. cm. after which it did not soften at 240°. The powder of the copolymer which was obtained by polymerization in ampules could not be molded. The copolymerization of methyl methacrylate with methoxyvinyl or with propoxyvinyl gave only sol. products. B. Z. K.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



C4

10

Neutral reaction products from reaction of isooctane with dilute nitric acid. S. S. Nametkin and K. S. Zakhodina (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 75, 395–8(1950); cf. following abstr.—Heating 5 g. isooctane, b_{760} 99.0–0.5°, d_4^{20} 0.6918, n_D^{20} 1.3916, with 35 ml. HNO_3 (d. 1.076) 20 hrs. in a sealed tube to 143–7° with periodic relief of the pressure, followed by washing with $NaHCO_3$, gave among the neutral products (from combined runs with 315 g. hydrocarbon): 138 g. unreacted isooctane; some $MeNO_2$ (detected qualitatively but not isolated because b.p. proximity to the above); 1.7 g. Me_3CCH_2Ac, b_{760} 126.5–6.0°, d_4^{20} 0.8080, n_D^{20} 1.4032; 5 g. $Me_3CCOCHMe_2$, b_{760} 133.5–5.0°, d_4^{20} 0.8075, n_D^{20} 1.4060; and a little Me_2CO. Washing the residue with strong NaOH resulted in isolation of 2.4 g. $Me_3CCH(NO_2)CH_2Me_2$, b_5 69–71°, d_4^{20} 0.9313, n_D^{20} 1.4388; an unstated but considerable amt. of $Me_3CCH_2C(NO_2)_2Me_2$, $b_{0.5}$ 100.4°, d_4^{20} 0.9394, n_D^{20} 1.4360 (heated further as above, the product decomp. to $MeNO_2$ and Me_3CCH_2Ac); and 5.1 g. $Me_2C(CH(NO_2)C(NO_2)Me_2$, $b_{0.5}$ 124–4.5°, d_4^{20} 1.1022, n_D^{20} 1.4526, which, warmed with alc. NaOH, yields the Na salt of the isonitro deriv.

G. M. Kosolapoff

CA

10

Connection between reactions of nitration and oxidation with nitric acid in saturated hydrocarbons. S. S. Namerkin and K. S. Zabrodina (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 71, 701-2 (1950); cf. preceding abstr.—Nitration of isobutane yields $Me_2CHCH(NO_2)CMe_3$, $Me_2CHCOCMe_3$, Me_3CCO_2H, and Me_2CO. Here the action is centered at a secondary C atom. At a tertiary C atom, where an isonitro deriv. is impossible, a loss of nitroalkane takes place, followed by formation of ketones and their oxidation products (cf. preceding papers). The results confirm the connection between nitration and oxidation reactions in dil. HNO_3.
G. M. Kosolapoff

1951

ZABRODINA, K. S.

"Studying the Nitration of Paraffins Having a Quaternary Carbon Atom (2,2,4-Trimethylpentane) by Konovalov's Method." Sub 25 May 51, Moscow Order of Lenin State U imeni M. V. Lomonosov.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

CA

10

Acidic products of reaction of isooctane with nitric acid. S. S. Nametkin and K. S. Zabrodina (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 75, 543-5(1951); cf. *C.A.* 45, 6096*i*.—Fractional steam distn. used as the basis for the sepn. of the acidic products of the reaction of isooctane with HNO_3 (d. 1.075) showed the presence of: *AcOH*, *iso-PrCO₂H*, Me_4CCO_2H (*p-phenylphenacyl ester*, m. 112.8–13.0°), *tert-BuCH₂CO₂H*, *α,α-dimethylsuccinic acid*, and traces of $(CO_2H)_2$. G. M. K.

1951

ZABRODINA, K. S.

USSR/Chemistry - Nitroparaffins Nov 51
Fuels, Propellants

"On Some Transformations of 2,2,4-Trimethyl-4-Nitropentane," Acad S.S. Nametkin (Deceased), K. S. Zabrodina, Moscow State U imeni M. V. [illegible]

"Dok Ak Nauk SSSR" Vol LXXXI, No 1, pp 55-57

Lists data on 2,2,4-trimethyl-4 nitropentane (tert-nitroisooctane, I), principal product obtained by them in the oxidation of isooctane in sealed tubes at 145-50° with HNO_3 of sp gr [illegible]

198T4

USSR/Chemistry - Nitroparaffins (Contd) Nov 51

1,075. Under the conditions of M. I. Konovalov's reaction nitration with dilute HNO_3, I decomposes with formation of gradually and 2,2-dimethylpentanone-4 nitromethane (II). II is then oxidized further. This establishes the interdependence between nitration and oxidation of isoparaffins and shows that tertiary aliphatic nitro compds may function as intermediate products in oxidation.

198T4

ZABRODINA, K. S.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Analytical Chemistry

Gasometric determination of aldehydes and ketones. V. A. Terent'ev and K. S. Zabrodina (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 92, 1181–4 (1953).—The following gasometric method for aldehydes and ketones, run in pyridine soln., is described. In a small distn. flask, treat 3 ml. of 5% $PhNHNH_2 \cdot HCl$ soln. with 4.5 ml. pyridine and a sample of the substance to be tested; heat the mixt. on a water bath 30–45 min. or keep at room temp. 2–4 hrs. Then add 10 ml. H_2O, fit the flask with a dropping funnel whose tip goes to the bottom of the flask and connect the side-tube of the flask to an azotometer contg. 50% aq. EtOH for absorption of Et_2O. Displace the air by warming the vessel and add. satd. $Cu(NO_3)_2$ soln. to the reaction mixt. until a green color forms; when N_2 evolution stops, add 2 ml. satd. $FeSO_4$ and 5–7 ml. Et_2O and expel residual N_2 into the azotometer by warming. In this manner a variety of aldehydes and ketones showed their CO content within 0.005 units. G. M. K.

KLIMOVA, V.A.; ZABRODINA, K.S.

Microdetermination of alkoxyl groups by the Zeisel-Viebock modified method. Zhur. anal. khim. 18 no.1:109-112 Ja '63. (MIRA 16:4)

1. N.D. Zelinsky Institute of Organic Chemistry, Academy of Sciences, U.S.S.R., Moscow.
(Alkoxy groups)

L 20346-66 EWT(m)/EWP(j) RM

ACC NR: AP6012084 SOURCE CODE: UR/0062/65/000/001/0178/0180

AUTHOR: Klimov, V. A.; Zabrodina, K. S.; Shitikova, N. L.

ORG: none

TITLE: Microdetermination of alkoxyl groups in organo-silicon and organo-germanium compounds

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1965, 178-180

TOPIC TAGS: microchemical analysis, organogermanium compound, organosilicon compound, orthophosphoric acid, iodine compound

ABSTRACT: A modification of the "Tseyzel-Fibek" method is proposed for the microdetermination of alkoxy groups in organosilicon and organogermanium compounds. This modification avoids the use of hydriodic acid, which decomposes on standing, by using a mixture of potassium iodide and orthophosphoric acid to decompose the alkoxy compound; upon being heated this mixture forms hydriodic acid. The results of the microdetermination of the alkoxy groups in triethylmethoxysilane, diethylmethoxysilane, dimethyldiethoxysilane, methyltriethoxygermanium, and dimethyldipropoxygermanium are presented. A detailed description of the determination is also presented. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 07 / SUBM DATE: 28May64 / ORIG REF: 004 / OTH REF: 001

Card 1/1 BK

UDC: 543.063

KLIMOVA, V.A.; ZABRODINA, K.S.; SHITIKOVA, N.L.

Microdetermination of alkoxyl groups in sulfonic acid esters. Izv. AN SSSR. Ser. khim. no.7:1288-1289 '65. (MIRA 18:7)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

KHIMOVA, V.A.; ZABRODINA, K.S.; SHITIKOVA, N.I.

Microdetermination of alkoxy groups in silicon and germanium organic compounds. Izv. AN SSSR Ser. khim. no.1:178-180 '65. (MIRA 18:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

KLIMOVA, V.A.; ZABRODINA, K.S.

Microdetermination of methoxy and ethoxy groups. Izv. AN SSSR Otd.khim.nauk no.12:2234-2235 D '61. (MIRA 14:11)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Ethoxy group) (Methoxy group)

KLIMOVA, V.A.; ZABRODINA, K.S.

Microdetermination of primary and secondary saturated nitro compounds. Izv. AN SSSR. Otd. khim. nauk no. 1:176-177 Ja '61. (MIRA 14:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Nitro compounds)

5(3) SOV/62-59-7-33/38

AUTHORS: Klimova, V. A., Zabrodina, K. S.

TITLE: Microdetermination of the Keto Group With the Oximating Method (Mikroopredeleniye keto-gruppy metodom oksimirovaniye)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 7, pp 1343 - 1345 (USSR)

ABSTRACT: A previous paper (Ref 1) had revealed that the formation of oximes with hydrochloric hydroxyl amine may be made use of for the microdetermination of the carbonyl group; it takes place by the following reaction: $RCOR_1+NH_2OH.HCl \longrightarrow RC(=NOH)R_1+$ $+H_2O+HCl$. This reaction is very quick and takes place at room temperature. Heating is required for compounds of the type $\rangle CH-CO-CH\langle$ or $\rangle C-CO-CH\langle$. Under the conditions mentioned an investigation was carried out here to determine the carbonyl group in ketones, esters of ketonic acid and also in diketones which permit oximation. The analytic data are compiled in a table. The determination course is described. It was found that when using 0.3 normal solution of hydrochloric hydroxyl amine, the accuracy of the determination method is higher as

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compared with the utilization of 0.5 n-solution. The following formula was applied for the computation of the %-content of CO with the potentiometric titration: $\%CO\text{-group} = \frac{28.1N(a-b).100}{m}$. There are 1 table and 1 Soviet reference.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: January 14, 1959

ZABRODINA, A.S.; ZABRODINA, K.S.

Nitration of paraffins, cycloparaffins and paraffin chain of aromatic compounds; the M.I.Konovalov reaction. Reakts.sposob. 7:133-222 '58. (MIRA 12:5)
(Paraffins) (Nitration)

KLIMOVA, V.A.; ZAHRODINA, K.S.

Microdetermination of the carbonyl group by oximation. Izv. AN SSSR. Otd.khim.nauk no.1:175-176 Ja '59. (MIRA 12:4)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Carbonyl group) (Oximes)

5(3) SOV/62-59-4-3/42

AUTHORS: Klimova, V. A., Zabrodina, K. S.

TITLE: Simultaneous Microdetermination of Carbon, Hydrogen, and Nitrogen in Nitro Compounds (Odnovremennoye mikroopredeleniye ugleroda, vodoroda i azota v nitrosoyedineniyakh)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 4, pp 582-585 (USSR)

ABSTRACT: The methods described in publications for the simultaneous determination of carbon, hydrogen, and nitrogen in organic compounds are based on the combustion of the substance up to carbonic acid, water, and elemental nitrogen. The method suggested in the present paper consists in burning the substance to be investigated during evaporation in an oxygen stream on platinum. Carbonic acid, water, and nitrogen dioxide, which are formed, are quantitatively absorbed by suitable absorbers and the percentage contents of C, H, N are calculated from the weight increase of the absorbers. In this method the mode of combustion is of decisive importance. A combustion with preceding pyrolysis as is employed in the determination of C and H is not suitable because it reduces the nitrogen dioxide yield

Card 1/3

and involves the formation of a considerable amount of elemental nitrogen. To avoid pyrolysis the evaporation must be slow. The rate of the oxygen stream is of high importance. The optimum rate is 5-8 milliliters per minute (Table 1). Nitrogen dioxide is collected by manganese dioxide (Ref 8), as well as by silica gel impregnated with a 0.02 M $K_2Cr_2O_7$ solution in sulphuric acid (specific gravity 1.84) (Ref 9). The latter has the advantage of absorbing large amounts of nitrogen oxides for an equal length of layer. A certain amount may be retained by the condensation water at the inlet end of the anhydron-filled absorption apparatus. This leads to inaccurate results. For this reason the anhydron-filled apparatus is heated to 75-85° at this point. The temperature of the apparatus filled with anhydron must be less than 100° (Ref 10). During the analysis of haloid-containing nitro compounds a silver gauze roll is also placed in the combustion tube. During the combustion of nitro compounds containing no haloid only a platinum gauze roll 15 cm long is placed in the zone of the elongated furnace. Carbonic acid is absorbed by ascarite and water by anhydron. A scheme of the in-

Simultaneous Microdetermination of Carbon, Hydrogen, and Nitrogen in Nitro Compounds

stallation for the simultaneous microdetermination of C, H, N in nitro compounds having the composition C, H, N, O, Cl, Br is shown in the figure. Analysis results are given in table 2. There are 1 figure, 2 tables, and 10 references, 3 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: July 16, 1957

Card 3/3

5(3) SOV/62-59-1-34/38

AUTHORS: Klimova, V. A., Zabrodina, K. S.

TITLE: Microdetermination of the Carbonyl Group by the Oximation Method (Mikroopredeleniye karbonil'noy gruppy metodom oksimirovaniya)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 1, pp 175 - 176 (USSR)

ABSTRACT: The method of microdetermination suggested in this communication is based on the oximation with hydroxylamine hydrochloride in the presence of triethanol amine by which the hydrochloric acid separated in the reaction is neutralized. The excess of triethanol amine is determined by titration with hydrochloric acid. Bromophenol blue is used as an indicator. In order to determine the end of titration more precisely sodium chloride solution is added. The method can be applied for the determination of aldehydes and ketones which in addition to the carbonyl group possess also methylene groups with mobile hydrogen. This method has an accuracy of ± 0.3%. There are 1 table and 4 references.

Card 1/2

Microdetermination of the Carbonyl Group by the Oximation Method

SOV/62-59-1-34/38

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: June 20, 1958

Card 2/2

BLYUMIN, I.Sh.; POLUKHINA, K.P.; ZABRODINA, L.I.

Hakim serum reaction in the diagnosis of cancer. Vop. onk. 11 no.2:91 '65. (MIRA 18:7)

1. Iz Kuybyshevskogo oblastnogo onkologicheskogo dispansera (glavnyy vrach - N.N. Rodionova) i poliklinik Nr. 7 (glavnyy vrach L.Ya. Brodskaya).

KORSAKOVA, M. P. and ZABRODINA, O.L.

"The Course of Development of Bacterial Cultures and the Formation of Bacteriophage," Sbornik Nauchnykh Rabot Vologod NII Epidemiol i Mikrobiol, (Collection of Scientific Works of the Vologda Scientific-Research Institute of Epidemiology and Microbiology), 1950, No.1

Mikrobiologiya, Vol XX, No. 5, 1951
W-24635

KORSAKOVA , M.P. and ZAERODINA, O.L.

"The Role of Dissociation in the Interrelationships Between Phages and Krause-Sonne Bacteria,"
Zhur Mikrobiol, Epidemiol i Immunobiol, 1950
No. 4

Mikrobiologiya, Vol. XX, No. 5, 1951
W-24635

KORSAKOVA, M.P.; ZABRODINA, O.L.

Phage typing of local Sonne bacterias. Zhur.mikrobiol.epid.i immun. no.4:79 Ap '54. (MLRA 7:5)

1. Iz Vologodskogo instituta epidemiologii i mikrobiologii.
(Shigella paradysenteriae)

VAKAR, A.B.; EL'-MILIGI, A.K.; TOLCHINSKAYA, Ye.S.; ZABRODINA, T.M.

Physicochemical properties of gluten determining its quality.
Biokhim. zer. i khlebopech. no.7:3-62 '64.
(MIRA 17:9)

1. Institut biokhimii imeni Bakha AN SSSR i Vsesoyuznyy nauchno-issledovatel'skiy institut zerna.

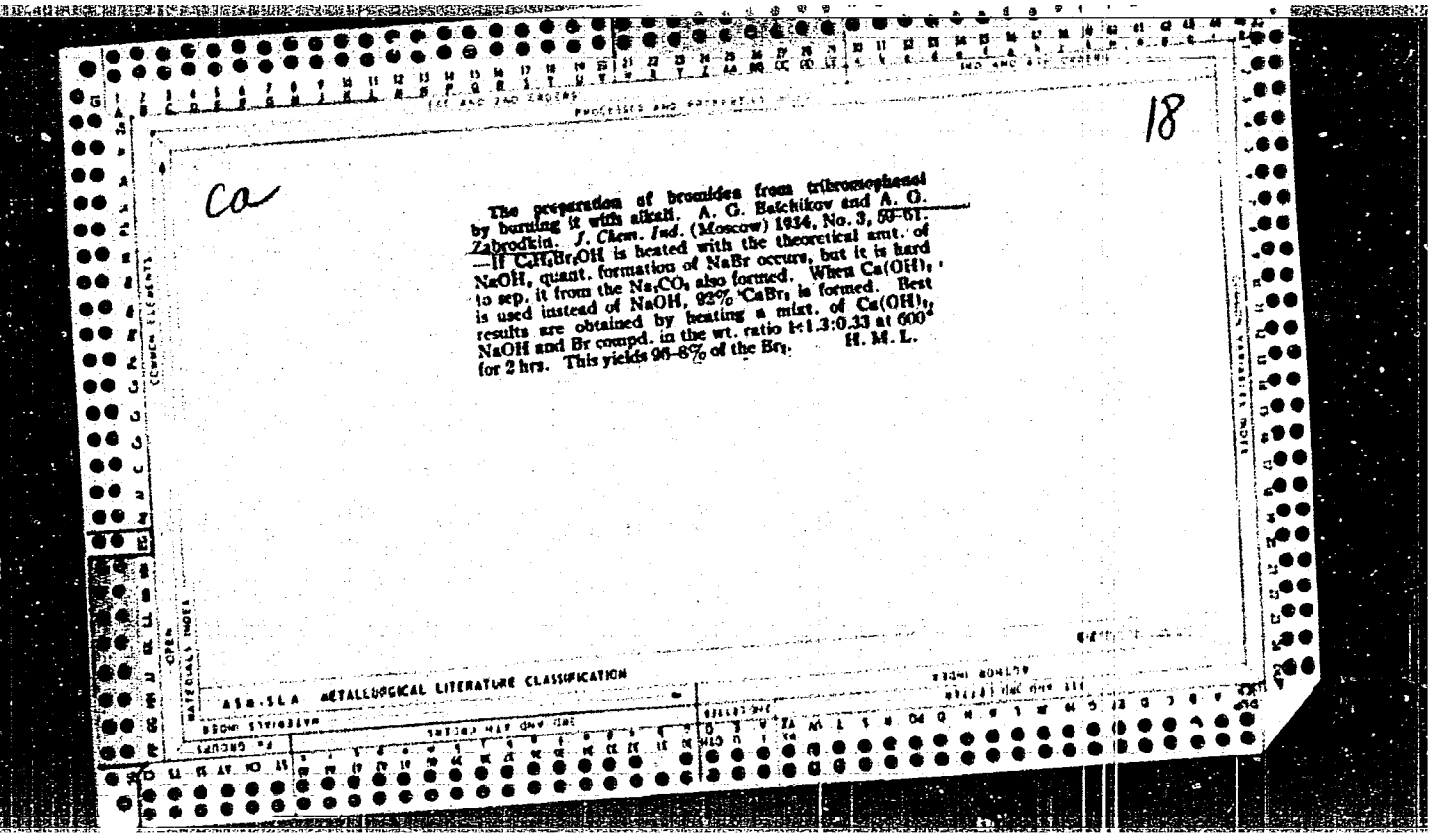
ZABRODINA, V. S.

27776. ZABRODINA, V. S. -- Proizvodstvo cherepitsy. (Opyt brigad tekhn. pomoshchi Rosstromproyekta). Mest. Stroit. Materialy, 1948, Vyp. 10, S. 16-23.

SO: Letopis' Zhurnal'nykh Statey, Vol. 37, 1949.

ZABRODINA, Valentina Vasil'yevna; DUHNOVA, Z.K., red.

[Industrial finance] Finansy promyshlennosti. Moskva, Vysshaia shkola, 1964. 123 p. (MIRA 18:1)

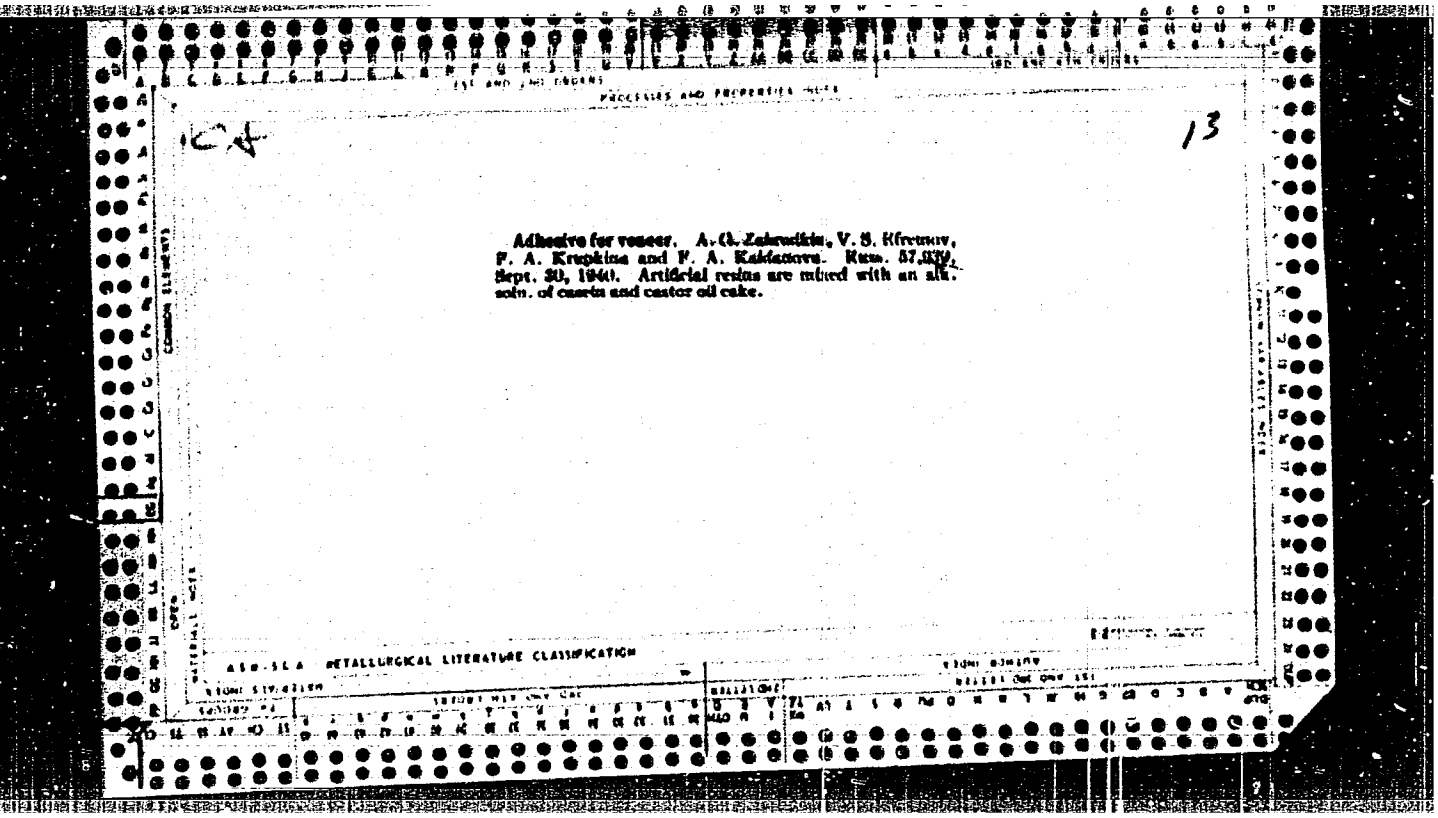


18

Ca

The preparation of bromides from tribromophenol by burning it with alkali. A. G. Batchikov and A. G. Zabrodkin. *J. Chem. Ind.* (Moscow) 1934, No. 3, 59-61.—If $C_6H_3Br_3OH$ is heated with the theoretical amt. of NaOH, quant. formation of NaBr occurs, but it is hard to sep. it from the Na_2CO_3 also formed. When $Ca(OH)_2$ is used instead of NaOH, 92% $CaBr_2$ is formed. Best results are obtained by heating a mixt. of $Ca(OH)_2$, NaOH and Br compd. in the wt. ratio 1:1.3:0.33 at 600° for 2 hrs. This yields 96-8% of the Br. H. M. L.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

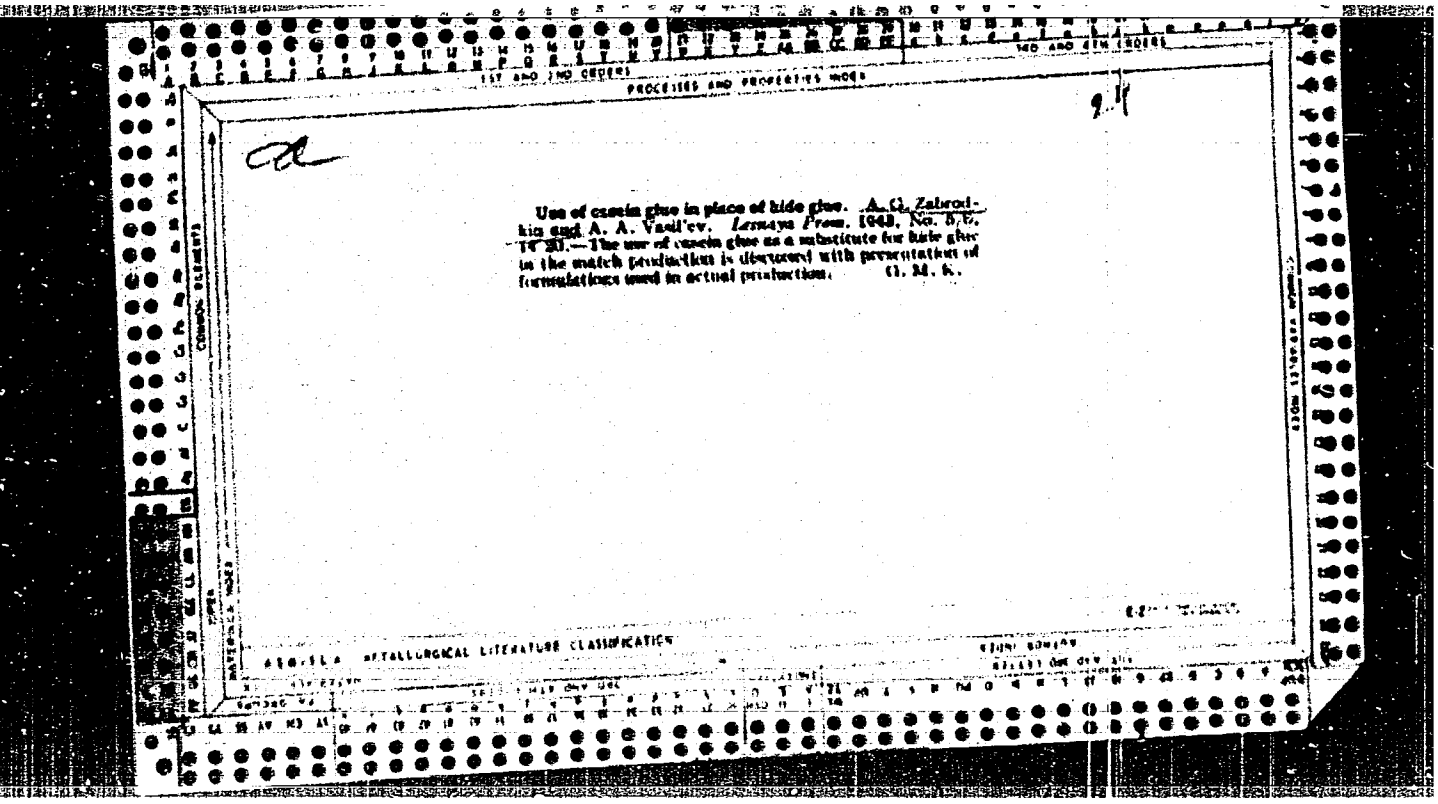


C4

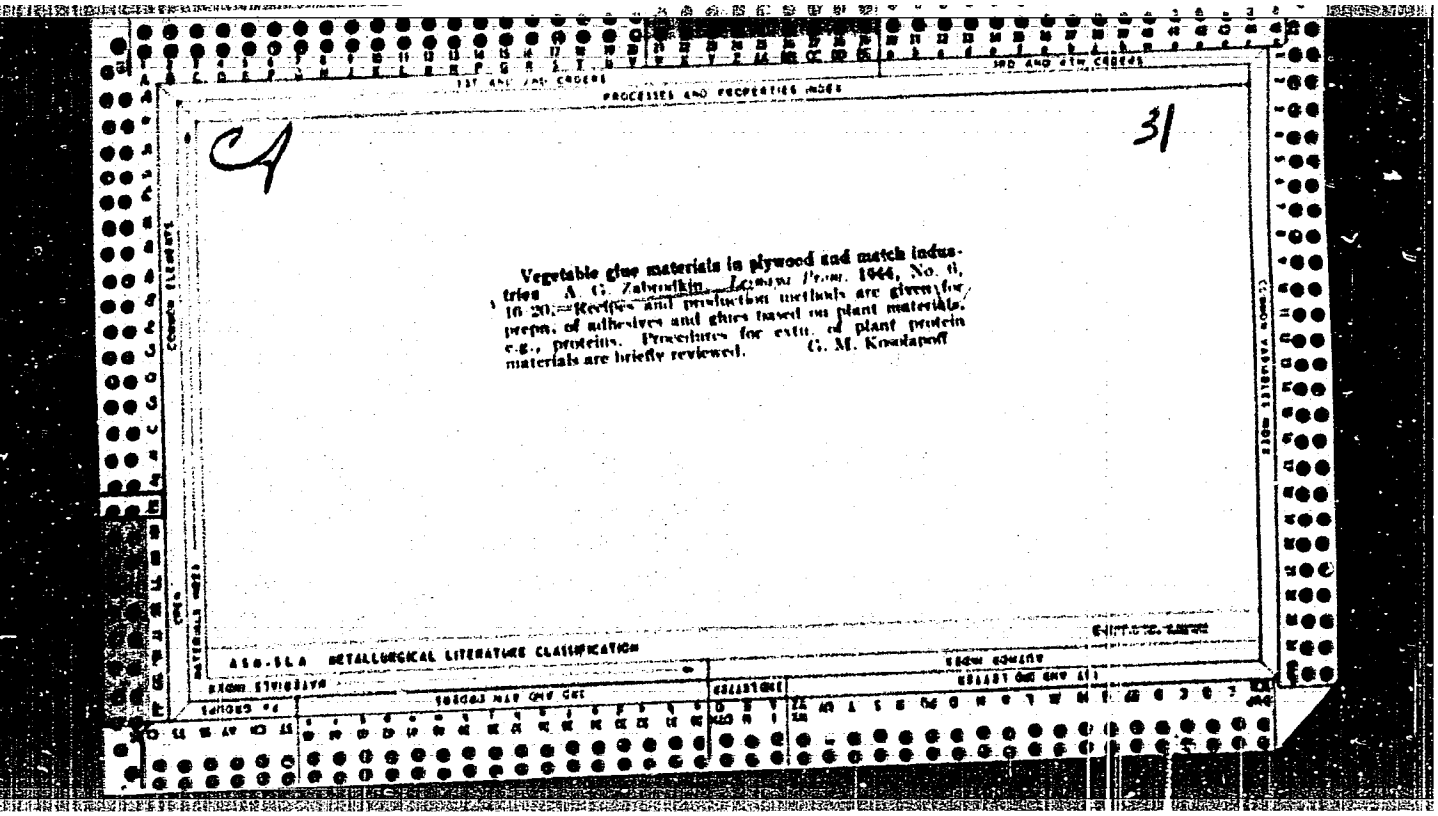
13

Adhesive for veneer. A. Ch. Zakrevskii, V. S. Kfretsov, P. A. Krupkina and P. A. Kukhtareva. Russ. 57,039, Sept. 30, 1941. Artificial resins are mixed with an alk. soln. of casein and castor oil cake.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Use of casein glue in place of hide glue. A. G. Zabrodkin and A. A. Vasil'ev. *Lesnaya Prom.* 1948, No. 5, 6. TP 33.—The use of casein glue as a substitute for hide glue in the match production is discussed with presentations of formulations used in actual production. G. M. K.



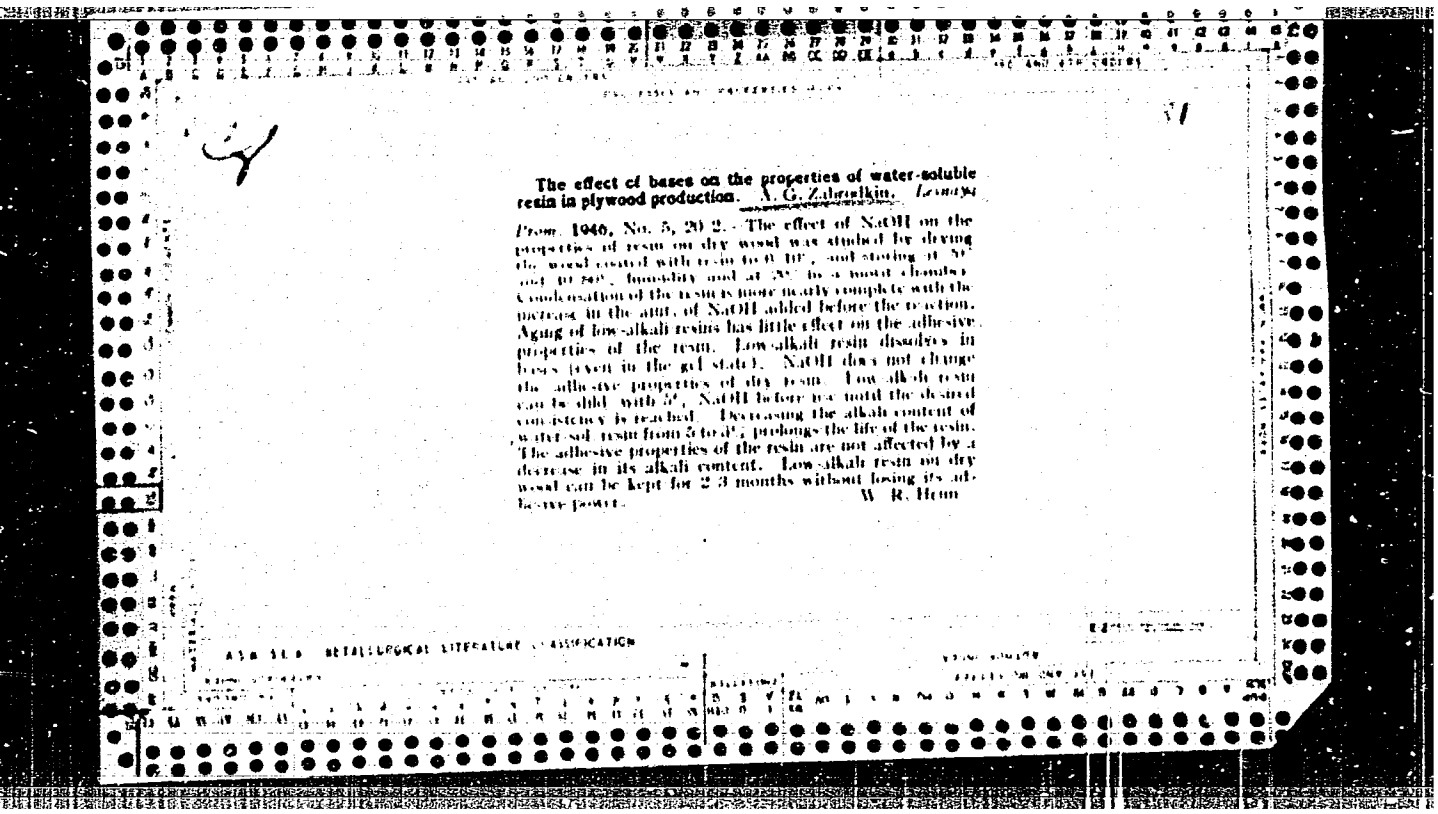
PROCESSES AND PROPERTIES INDEX

4

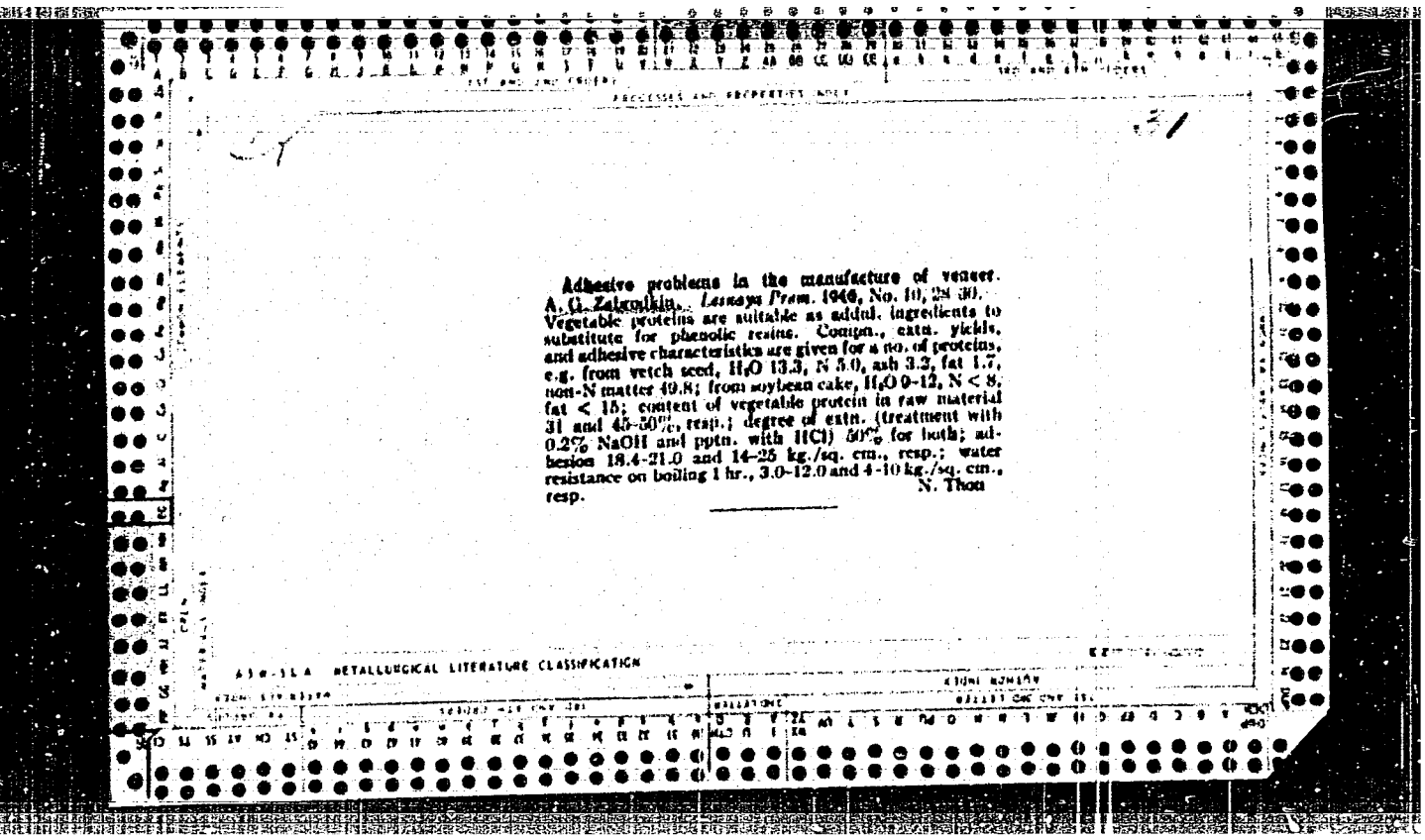
31

Vegetable glue materials in plywood and match industries. A. G. Zabrodkin. *Lesnaya Prom.* 1944, No. 6, 16-20.—Receipts and production methods are given for prepn. of adhesives and glues based on plant materials, e.g., proteins. Procedures for extn. of plant protein materials are briefly reviewed. G. M. Kondakoff

A56-51A METALLURGICAL LITERATURE CLASSIFICATION



The effect of bases on the properties of water-soluble resin in plywood production. A. G. Zabrodkin. *Lesnaya Prom.* **1940**, No. 5, 20-2.—The effect of NaOH on the properties of resin on dry wood was studied by drying the wood coated with resin to 6-10%, and storing it 30 min. at 20°, humidity and at 30° in a moist chamber and at 80°. Condensation of the resin is more nearly complete with the increase in the amt. of NaOH added before the reaction. Aging of low-alkali resins has little effect on the adhesive properties of the resin. Low-alkali resin dissolves in hot water even in the gel state. NaOH does not change the adhesive properties of dry resin. Low-alkali resin can be diluted with 5% NaOH before use until the desired consistency is reached. Decreasing the alkali content of water-sol. resin from 5 to 0% prolongs the life of the resin. The adhesive properties of the resin are not affected by a decrease in its alkali content. Low-alkali resin on dry wood can be kept for 2-3 months without losing its adhesive power. W. R. Henn



Adhesive problems in the manufacture of veneer. A. G. Zalgalkin. *Lesnaya Prom.* 1946, No. 10, 28-30. Vegetable proteins are suitable as addnl. ingredients to substitute for phenolic resins. Compn., extn. yields, and adhesive characteristics are given for a no. of proteins, e.g. from vetch seed, H_2O 13.3, N 5.0, ash 3.2, fat 1.7, non-N matter 49.8; from soybean cake, H_2O 9-12, N < 8, fat < 15; content of vegetable protein in raw material 31 and 45-50%, resp.; degree of extn. (treatment with 0.2% NaOH and pptn. with HCl) 50% for both; adhesion 18.4-21.0 and 14-25 kg./sq. cm., resp.; water resistance on boiling 1 hr., 3.0-12.0 and 4-10 kg./sq. cm., resp.

N. Thon

A 1 0 - 1 L A METALLURGICAL LITERATURE CLASSIFICATION

S/672/62/000/011/006/011
D403/D307

AUTHORS: Shishenkova, Ye. V., Gabrielkin, A. G., Liyeva, V. Yu. and Semenov, S. S.

TITLE: Adhesive resins from hydrogenation phenols

Leningrad. Vsesoyuznyy [illegible]-issledovatel'skiy insti-
[illegible]va. Trudy, no. [illegible]
[illegible]
pererabotki, 120-126

[illegible] present work is an indirect continuation of earlier stu-
[illegible] Shale In-
stitute [illegible] (Trudy [illegible], no. 9, Gostoptekhizdat, [illegible], the
1960) and VNIIT (Trudy VNIIT, no. 9, Gostoptekhizdat, [illegible], the
investigation was directed at using the substances obtained by the
[illegible] of shale phenols as the raw material
for the production of [illegible]. Hydrogenation of phenols
[illegible] and phenols obtained during the hydrogenation of [illegible]
[illegible] used to make the resins. The adhe-
sives used above [illegible]

Card 1/2

Adhesive resins from ...

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sives were tried on plywood and bakelite-treated plywood, at 140 - 150°C, and under 19 - 23 and [illegible] - 40 kg/cm² respectively. [illegible] found that I and II resins may be used as adhesives with additions of [illegible]% of [illegible] [illegible] weight; in the absence of additives I and II resins may only serve as adhesives if the pressing times are increased by 50 - 100%. The adhesives are also improved by additions of 5.5 - 6.5% of resorcinol or technical dimethylresorcinol; such glues are suitable for bakelite-treated plywood. [illegible] tables

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ZABRODKIN, A. G.

Plywood Industry

Decreasing losses of auxiliary material in the plywood industry. Der. i lesokhim. prom. 1, No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

ZABRODKIN, A.G., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii.

Determining the thermal cycle for gluing wood with urea resins. Der. i lesokhim.prom. 2 no. 6:15-19 Je '53. (MLRA 6:5)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Resins, Synthetic)

ZABRODKIN, Aleksandr Gavrilovich, kandidat tekhnicheskikh nauk, laureat Stalinskoy premii; KRASOVSKIY, S.P., retsenzent; LEBEDEV, V.S., retsenzent; SMIRNOV, A.V., redaktor; KARASIK, M.P., tekhnicheskiy redaktor.

[Chemistry and technology of adhesives] Khimiia i tekhnologiia kleevykh veshchestv. Moskva, Goslesbumizdat, 1954. 220 p. (MLRA 7:12)
(Adhesives)

ZABRODKIN, A.G., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii.

Carbamide resins and their use in the furniture industry. Der.prom. 4 no.10:3-5 O '55. (MLRA 9:1)

1.TSentral'nyy Nauchno-issledovatel'skiy institut fanery i mebeli.
(Furniture industry) (Urea)

ZABRODKIN, A.G., kandidat tekhnicheskikh nauk.

Characteristics of carbamide resins used in the furniture industry abroad. Der.prom. 5 no.7:27-28 Jl '56. (MIRA 9:9)
(Glue) (Urea)

ZABRODKIN, A. G.

USSR /Chemical Technology. Chemical Products and Their Application I-25

Synthetic polymers. Plastics.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32480

Author : Zabrodkin A.G., Sultanbek R. Kh.

Title : Use of Liquid Phenols Derived from Coal in Plywood Manufacture

Orig Pub: Derevoobrabat. prom-st', 1956, No 8, 9-11

Abstract: A procedure has been worked out for the preparation of adhesive resins from liquid phenols of coal, supplied in accordance with GOST 5361-50, without addition of synthetic phenols. Two manufacturing formulas of the resin are recommended: containing 40% solids and 5% alkali and one

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Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32480

containing 45% solids and 4.5% alkali. The resins prepared according to the two formulas have identical physico-chemical characteristics and adhesive properties.

ZABRODKIN, A.G., kandidat tekhnicheskikh nauk.

Labor protection in working with resin glues. Der. prom., 6 no.2: 17-18 F '57. (MLRA 10:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Chemistry, Technical--Safety measures)
(Gums and resins, Synthetic)

ZABRODKIN, A.G., kandidat tekhnicheskikh nauk.

Plywood gluing without preliminary drying of resin covered veneer. Der.prom. 6 no.6:7-9 Je '57. (MLRA 10:8)

1.TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Veneers and veneering)
(Gums and resins, Synthetic)

ZABRODKIN, A.G.

PLOTNIKOVA, G.P.; MIRKOVICH, R.A.; ZABRODKIN, A.G.

Adhesive films in the furniture industry. Der.prom. 6 no.7:7-9 Jl '57. (MLRA 10:8)

1.TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Gums and resins, Synthetic) (Furniture industry) (Gluing)

ZABRODKIN, A.G.

ZABRODKIN, A.G.; ARTSYSHEVSKAYA, Ye.K.

Using raw phenols in producing the FSL water-soluble resin. Der. prom. 7 no.2:18 F '58. (MIRA 11:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Phenols) (Gums and resins)

ZABRODKIN, A.G., kand. tekhn. nauk

Modern gluing materials. Der. prom. 7 no. 6:15-16 Je '58.
(MIRA 11:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Glue)

ZABRODKIN, A.G.; LIYEVA, V.Yu.; VASIL'YEV, M.L.

Synthesis of gluing materials from high-boiling shale-oil phenols. Khim. i tekh. gor. slan. i prod. ikh perer. no.9:236-241 '60. (MIRA 15:6)

(Glue) (Oil shales) (Phenols)

ZABRODKIN, A.G.; ZELENIN, N.I.; LIYEVA, V.Yu.; FEOLILOV, Ye.Ye.; VASIL'YEV, M.L.

Plane tests of synthetic adhesives on a base of shale phenols boiling at temperature up to 300°. Khim. i tekh. gor. slan. i prod. ikh perer. no.10:246-252 '62. (MIRA 17:5)

Plant tests of synthetic adhesives on a base of shale tar phenols combined with tricresol and boiled away at temperature above 300°. Ibid.:253-256

GLUSHENKOVA, Ye.V.; LIYEVA, V.Yu.; SEMENOV, S.S.; ZABRODKIN, A.G.; GONCHAROV, V.I.; KALASHNIKOVA, Ye.B.

Adhesive resins from shale phenols of nonalkaline separation. Trudy VNIIT no.12:83-89 '63. (MIRA 18:11)

ZABRODKIN, A.G., kand. tekhn. nauk

Synthetic glues for the manufacture of plywood. Der. prom. 14 no. 12:9-12 D '65. (MIRA 18:12)

ZABRODKIN, A.G., kand. nauk

Use of synthetic glues in the production of plywood. Der. prom. 14 no.6:5-7 Je '65. (MIRA 18:7)

1. TsNIIF.

TEMKINA, Riva Zakharovna, kand. khim. nauk; ZAIKODKIN, A.G., red.

[Technology of synthetic resins and adhesives] Tekhnologiia sinteticheskikh smol i kleev. Moskva, Lesnaia promyshl., 1965. 210 p. (MIRA 18:4)

GLUSHENKOVA, Ye. V.; ZABRODKIN, A. G.; LIYEVA, V. Yu.; SEMENOV, S. S.

Adhesive tars from hydrogenated phenols. Trudy VNIIT no. 11:120-126 '62. (MIRA 17:5)

ZABRODKIN, A.G., kand.tekhn.nauk

Additional raw material sources for the manufacture of urea-phenol-formaldehyde resins used in wood gluing. Der.prom. 11 no.12:3-4 D '62. (MIRA 16:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii obrabotki drevesiny.
(Adhesives) (Resins, Synthetic)

S/583/62/000/010/002/002
I001/I210

AUTHORS: Zabrodkin, A. G., Zelenin, N. I., Vasiliev, M. L., Feofilov, E. E. and Lieva, V. Yu.

TITLE: Industrial tests of synthetic adhesives based on phenols of shale resin, boiling at a temperature higher than 300°C, and admixed with tricresol

SOURCE: Estonian SSR. Institut slantsev. Khimiya i tekhnologiya goryuchikh slantsev i produktov ikh pererabotki, no. 10, Leningrad, 1962, 235–256

TEXT: This is a continuation of previous works (Zelenin, N. I., Vasiliev, M. L., Feofilov, E. E., Khimia i tekhnologiya goryuchikh slantsev i produktovikh pererabotki, no. 9, 1960, 204; Zabrodkin, A. G., Lieva, V. Yu., Vasiliev, M. L., ibidem 236). The adhesive resin prepared in the laboratory was tested in the Ust'-Izhorsk plywood factory and the results showed that the resin with admixture of tricresol, and ethyl alcohol as a solvent could be used in the production of bakelized plywood. There are 4 tables and 1 figure.

ASSOCIATION: Soviet narodnogs khazyaystva ESSR repravlenie slantsevoy i khimicheskay promishlevnosti: Nauchno-issledovatelskiy institut po dubychei pererabotke slantsev "Institut slantsev" (Soviet of National Economy of Estonian SSR, Administration of Shale and Chemical Industry. Scientific Research Institute for Extraction and Processing of Shales—"Shale Institute")

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S/583/62/000/010/001/002
I001/I210

AUTHOR: Zabrodkin, A. G., Zelenin, N. I., Lieva, V. Yu., Feofilov, E. E. and Vasiliev, M. L.

TITLE: Industrial tests of synthetic adhesives based on shale-phenols boiling up to 300°C

SOURCE: Estonian SSR. Institut slantsev. Khimiya i tekhnologiya goryuchikh slantsev i produktov ikh pererabotki, no. 10, Leningrad, 1962, 246–252

TEXT: The development of the plywood industry required by the 7-year Plan needs new and cheaper adhesives. TsNIIFM developed a new method for the preparation and condensation of a water-soluble resin from shale-phenols with addition of tricresol. The resin was controlled under industrial conditions at the Ust'-Izharsk plywood factory. The finished product responded to the standard requirements ГОСТ-3916–55 (GOST-3916–55). Phenols were obtained in 1960 at the pilot plant of the shale works im-Lenina. The use of this resin economizes 50% of tricresol compared with the resin ЦНИИФМ-С-35 (TsNIIFM-S-35) and it can be introduced into ФСФ (FSF) brand plywood. There are 5 tables and 1 figure.

ASSOCIATION: Soviet narodnogs khazyaystva ESSR repravlenie slantsevoy i khimicheskay promishlevnosti: Nauchno-issledovatelskiy institut po dubychei pererabotke slantsev "Institut slantsev" (Soviet of National Economy of Estonian SSR, Administration of Shale and Chemical Industry. Scientific Research Institute for Extraction and Processing of Shales -- "Shale Institute")

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